

1.2 New claims 2 to 18 correspond to previous claims 2 to 18.

2. Inventive Step (Art. 33(3) PCT)

In the Written Opinion, the Examiner has contested inventive step of all claims on file. Applicant respectfully submits that the objections raised do not apply to the new claims on file. In order to corroborate this notion, we will discuss the various documents cited by the Examiner in more detail.

2.1 Kala et al., Analytical Biochemistry 254 (1997), 263-266 (D3)

This document describes the "development and characterization of a magnetic bead phage ELISA which detects antigen binding phage which could not be detected by conventional ELISA"; see abstract on page 263. In other words, the goal of the research underlying the publication Kala (D3) was to develop a refined detection method for phage displayed antigens that are not easily detected by conventional immunological methods. Specifically, Kala (D3) developed more sensitive ELISA technique by (i) utilizing magnetic beads as an antigen support instead of microtiter plates and (ii) utilizing phage as detection agent. Indeed, the authors found that higher detection sensitivity could be achieved using superparamagnetic particles rather than using conventional immunological methods. Indeed, the authors found that with superparamagnetic particles a higher detection sensitivity could be achieved. However, this finding has no bearing on selection procedures on a library versus library scale, as is described in the present invention.

It is thus immediately clear that the intention of the work underlying Kala (D3) is entirely different from the gist of the present invention. The gist of the present invention is to allow the simultaneous and easy screening and selection of large numbers of compounds from libraries which further allows the simultaneous detection of a variety of different molecular species of interest. In contrast, Kala

(D3) focuses on the improvement of detection of one specific antigen by applying a more efficient support to a classical, broadly used immunological method (ELISA). From reading D3, the person skilled in the art would not be motivated to turn to either D10 or D11 (as suggested by the Examiner) in order to screen in parallel for large numbers of specific binders from a diverse library against a variety of different antigens.

2.2 McConnell et al., BioTechniques 26 (1999), 213-214 (D4)

This document also is a comparative study of the efficiency of biopanning by a traditional microtiter plate versus magnetic bead method using a specific monoclonal antibody to human Interleukin-8; see the sentence bridging columns 1 and 2 of page 213. Insofar, the research interest of the work underlying D4 is comparable to that underlying D3. McConnell (D4) find that the recovery of specific anti-IL-8 binding phage was significantly higher in the bead panning as compared to conventional panning. Please be referred in this regard to page 214, left-hand column, second paragraph. As with Kala (D3), there is no motivation for the person skilled in the art to extend the method of D4 to the parallel analysis of a variety of clones of different specificity on a large library versus library screen.

2.3 DE 296 14 623 U and WO 93/25912 (D10 and D11)

Document D10 describes an apparatus useful in the automatization of known purification processes comprising separation, wash and elution steps using paramagnetic particles and moveable magnetic devices. D10 does neither contain any indication that a variety of members of libraries can be conveniently screened in parallel nor that selection procedures of binding partners can be performed as is required by the present invention.

Similar to D10, D11 is not even concerned with the screening of libraries. Rather, this document is solely concerned with the automatic preparation of

nucleic acids, in particular for the purpose of large-scale sequencing. Accordingly, the screening of libraries is by no means considered in D11.

We conclude that neither starting from D3 or D4 nor starting from D10 or D11, the person skilled in the art would be motivated to combine the disclosure content of these various documents. However, even if he or she did, the large-scale handling in screening and selection of several interacting partners from libraries in parallel is not derivable from such a combination without further ado.

In view of the above, it is submitted that the present invention as represented by the dependent new claims is inventive over the prior art.

3. Requests

With the above explanations and the proposed modification of the claims, it is submitted that the applicant has overcome the objections as set forth in the Written Opinion.

We request that a favorable International Preliminary Examination Report be issued.


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Enclosure:

New set of claims 1 to 18, in triplicate